

AN ENQUIRY INTO THE INFORMATION RETRIEVAL EFFICIENCY OF *LISA PLUS* DATABASE

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ABTRACT

Tests the information retrieval efficiency of LISA Plus database in retrieving the abstracts of articles on the library profession published in Asian library and information science journals from the aforementioned database by employing two different methods of computerised searches and a manual search. The manual search from LISA (printed version of LISA Plus) retrieved 73 articles in 26 minutes, whereas the computerised searches retrieved 42 and 19 articles in 90 and 41 minutes respectively. Examines the reasons why computerized searches took more time and retrieved less number of items. Suggests measures whereby the efficiency of computerised searches can be increased and concludes that to ensure comprehensive recall of relevant items, a combination of manual and computerised search is indispensable.

Keywords: Computerised search; Search efficiency; Information retrieval; LISA; LISA Plus database; Manual search ; Ulrich's Plus database.

INTRODUCTION

The Library Association, London, UK launched *Library Science Abstracts* in 1950. In the first year it covered 61 periodicals and included 611 abstracts. Gradually the coverage of the periodical increased over the years (*vide* Tables 1A and 1B) and it became an indispensable tool for the research workers, teachers, and students of library and information science (LIS). Information science, as an offshoot of library science, made its presence strongly felt in the 1960s. Keeping pace with time, *Library Science*

Abstracts embraced the new development to turn into *Library and Information Science Abstracts (LISA)* with effect from 1969. The online as well as CD ROM versions followed shortly after.

OBJECTIVES

The present study aims to compare the efficiency of information retrieval from LISA database conducted through manual and computerized searches. The printed version of *LISA* (1993) was used for the manual search and *LISA Plus* (1993) on CD-ROM for the computerised search.

Table 1A: Yearwise Distribution of Abstracts Included in *Library Science Abstracts*

Year	Number of Abstracts
1950	611
1951	952
1952	912
1953	887
1954	841
1955	1179
1956	1176
1957	1124
1958	1092
1959	1088
1960	1004
1961	969
1962	987
1963	1053
1964	1055
1965	1105
1966	1106
1967	1053
1968	1226

Table 1B Yearwise Distribution of Abstracts Included in *LISA*

Year	Number of Abstracts
1969	2567
1970	2858
1971	2619
1972	3137
1973	3037
1974	3837
1975	3870
1976	3446
1977	3631
1978	3562
1979	3813
1980	4887
1981	5536
1982	6004
1983	6778
1984	6993
1985	6507
1986	6476
1987	6435
1988	6498
1989	6488
1990	8141
1991	7015
1992	7101
1993	7591
1994	12029
1995	14155

SCOPE

The topic chosen for testing the efficiency is 'locating the articles on the library profession published in Asian LIS journals and abstracted in *LISA* 1993 (printed version) and *LISA Plus* CD-ROM version'. The abstracts pertaining to CR-LIS, a constituent of *LISA Plus* were not considered. In 1993 *LISA* switched over from the classification used by the Classification Research Group (1971) to a new system of ordering the abstracts under broad subject headings. Of course, each subject heading is associated with a class number. In this the library profession figured with six subdivisions as fol-

lows ensuring fast glancing and location of the required item.

2.0 Profession

- 2.1 Organisations
- 2.11 Biographies
- 2.12 Education and Training
- 2.13 Library and Information Science Staff
- 2.14 Personnel Management
- 2.15 Types of Staff.

As far as journals are concerned, all Asian journals covered by *LISA* were considered. For identifying Asian journals *Ulrich's Plus* 1993/94 edition was used.

METHODOLOGY

The steps considered essential to conduct the study were as follows:

1. Listing the Asian countries which publish LIS journals.

This had to be done because the country of origin of a journal could not be ascertained from *LISA*. Neither could it be ascertained in all cases from the title. Some titles such as *Asian Libraries* can easily be recognised as Asian. Whereas titles like *Kekal Abadi* does not reveal the country of its origin. Some such titles as *SALG* [South Asia Library Group] *Newsletter*, and *Arabic Journal of Information* which appear to be of Asian origin are non-Asian in reality.

2. Locating the Asian titles on library and information science from *Ulrich's Plus* database.

Ulrich's Plus allows retrieval of information from the following approaches. Each approach uses a two-letter abbreviation (Table 2). From the list of approaches given it is quite clear that, for retrieving details about Asian periodicals country codes can be used as the search instrument.

3. Finding out the country code for each country of Asia publishing LIS journals.

The country code is provided on page IV-16 of the *User's Guide* of *Ulrich's Plus* database. However, the printed version of *Ulrich's International Periodicals Directory* (1988) was used for this purpose (Table 3).

Table 2 : Search Cue Prefixes of *Ulrich's Plus* Database

ti	=	Title
su	=	Subject
pu	=	Publisher
ed	=	Editor's Name
ai	=	Abstracted Index (with this command the list of journals covered by an abstracting/indexing service can be obtained)
sn	=	ISSN
ac	=	Area Code
sz	=	US State /Zip
cc	=	Country Code
ci	=	Circulation
co	=	Coden Number
dd	=	Dewey Decimal [class number]
lc	=	L C Class Number
da	=	Document Avail [document supply centres where full text is available]
ol	=	Online/CD ROM [vendor]
pr	=	Price
kw	=	Keyword
cs	=	Combine Set
yp	=	Year 1st Pub
me	=	Media Code [microfilm, videocassette, etc.]
sf	=	Special Features
sj	=	Special Index
tk	=	3,2,2,1 Title (by typing three, two, two, and one letter from the first four successive words of the title, the information about the title can be obtained)
pc	=	Publication Code
sc	=	Status Code (active, ceased, etc.,)

4. Identifying Asian LIS journals covered by *LISA*

The command ; [1]. ai=lisa, resulted in 364 hits from *Ulrich's Plus* 1993/ 94 indicating that *LISA* covers 364 titles from all over the world. For identifying the Asian journals country codes were used. For example, the command; [2]. cc=my , generated 285 hits. Now combining [1] and [2] ; only 1 hit was obtained. By pressing the F10 key the details for *Majallah Perpustakaan Malaysia*

Table 3 : List of Country Codes

Afghanistan	= AF
Bahrain	= BA
Bangladesh	= BG
Brunei	= BX
Burma	= BR (Name changed to Myanmar, but not the code)
Cambodia	= CB
China, Mainland	= CC
China, Republic of	= CH (In this article Main land China has been referred to as China, and Republic of China as Taiwan)
Cyprus	= CY
Hong Kong	= HK
India	= II
Indonesia	= IO
Iran	= IR
Iraq	= IQ
Israel	= IS
Japan	= JA
Jordan	= JO
Korea, North	= KN
Korea, South	= KO
Kuwait	= KU
Laos	= LS
Lebanon	= LE
Malaysia	= MY
Maldives	= XC
Mongolia	= MP
Nepal	= NP
Pakistan	= PK
Philippines	= PH
Qatar	= QA
Saudi Arabia	= SU
Sikkim	= SK
Singapore	= SI
Sri Lanka	= CE
Syria	= SY
Thailand	= TH
Turkey	= TU
UAE	= TS
Vietnam	= VN

N. B. Asian countries not publishing any LIS journal have not been included in the List.

was obtained. Repeating the procedure for all Asian countries, the following list was obtained (Table 4).

Table : 4 Countrywise List of Asian Periodicals Covered by LISA (Obtained through Procedure 4)

Country	Name of the Periodical
Bangladesh	Bangladesh Library Science News Bulletin
Hong Kong	Hongkong Library Association Journal
India	Annals of Library Science and Documentation Granthagar IASLIC Bulletin Indian Statistical Institute. Documentation and Research Centre. DRTC Refresher Seminar International Information Communication and Education Journal of Library and Information Science Library Herald Library Science with a slant to Documentation Lucknow Librarian Timeless Fellowship
Indonesia	Baca
Iran	Iranian Library Association Bulletin
Israel	Contributions to Information Science ISLIC Bulletin Yad Lakore
Japan	Biblos Information Science and Technology Association Journal Japan Society of Library Science Annals Library Journal Library System Library World Pharmaceutical Library Bulletin Senmon Toshokan
Jordan	Message of the Library
Malaysia	Majallah Perpustakaan Malaysia
Pakistan	Pakistan Library Bulletin
Philippines	Journal of Philippine Librarianship
Taiwan	Journal of Educational Media and Library

5. Identifying articles on the library profession published in the journals listed in Table 4 and abstracted in LISA 1993

The Search cue prefixes of *LISA Plus* provides the following approaches (Table 5).

Table 5 - Search Cue Prefixes of *LISA Plus**

ft	=	Free Text
su	=	Subject Descriptor
au	=	Author/Research Worker
kt	=	Title Keyword
ti	=	Title
so	=	Source
n	=	Corporate Name
ab	=	Abstract
la	=	Language
da	=	Publication Date
ed	=	Editor/Publisher
an	=	Abstract Number
kw	=	Keyword
sf	=	Subfile Indicator
af	=	Author Affiliation (applicable in the case of <i>CRLIS Plus</i>)
cy	=	Country of Research (applicable in the case of <i>CRLIS Plus</i>)
th	=	Thesaurus Term
cs	=	Combine Set

* Includes *CRLIS Plus*

As all abstract numbers in *LISA Plus 1993* starts with 93, hence the following command [1].an=93\$; resulted in 7951 hits indicating that *LISA Plus 1993* contains 7951 abstracts. The command ; [2]. kw=library prof\$ yielded 14075 hits.

The combination of the commands [1] and [2] , i.e. [3]. cs=[1] and [2] generated 671 hits indicating that there are 671 articles on the library profession included in *LISA 1993*.

For identifying each and every article on the library profession published in the journals listed in Table 4 and abstracted in *LISA*

1993, the following course of action was undertaken.

In the first case, the required information was retrieved in the following steps; [4] so=iaslic bulletin .. and [5] cs=[3] and [4] which gave 286 hits and 9 hits respectively.

The brief citation of all the 9 abstracts were displayed on the screen by pressing F10.

Next, all the abstracts were displayed one by one on the screen by pressing Shift-F10 and abstract numbers was noted.

This method was repeated for all the titles listed in Table 4. Let this method be called *AI method* since we retrieved the periodicals listed in Table 4 with the command ai=lisa.

6. Identifying articles on the library profession published in Asian LIS journals and abstracted in LISA Plus 1993 browsing through brief citations

This approach was considered necessary from the following considerations: (i) the list of periodicals (Table 4) obtained from *Ulrich's Plus* using the command ai (*vide* Table 2) did not seem to be exhaustive; (ii) it was felt that the titles of non-English journals given in *Ulrich's Plus* may not entirely tally with the ones given in *LISA Plus*, because of different methods of transliteration, or due to the variant translation of the title; (iii) different rendering of the titles in two sources was also sometimes encountered; and (iv) changes in titles were also not uncommon.

To identify the articles using this approach, involved the following steps.

First: Obtaining an exhaustive list of Asian LIS periodicals using *Ulrich's Plus* 1993/1994 edition. For completing the first step, the following course of action was undertaken.

i) Searching all periodicals on LIS covered by *Ulrich's Plus* 1993/1994 edition. For this command [1]. su=library\$ generated 2713 hits.

ii) Searching all periodicals originated from an Asian country. In this case, the search had to be conducted for each Asian country listed in Table 3 separately.

For example, for Bahrain the information was retrieved with the following commands: [2]. cc=ba ...gave 60 hits, and [3] combining the results of commands [1] and [2], i.e. [3]. cs=[1] and [2], gave a list of LIS periodicals from Bahrain. Pressing F10 displays the full entry indicating the status of the periodical whether it is still active. The procedure was repeated for each Asian country listed in Table 3. This resulted in the list of periodicals given in the Appendix.

Second: Scanning all the brief citations of the 671 abstracts (obtained under Methodology (5)) by pressing the key F10.

Third : Selecting the item that matches with any of the titles of Asian LIS periodicals (see Appendix).

Fourth: Viewing the abstract of the selected item by pressing Shift+F10.

Fifth: Noting down the abstract number in case the abstract belongs to an Asian LIS journal. Let this method be called *Citation scanning method (CS Method)*

7. Identification of the articles published in Asian LIS journals and abstracted in LISA 1993 (the printed version)

In all, eleven issues (November/December issue being a combined one) of *LISA 1993* were checked one by one browsing the entries under the headings mentioned under **Scope** in this article and the abstract numbers noted.

Let this method be termed as the *Manual method*

8. Recording of Time

In all the three methods, the time was first noted using a watch when the search began and finally noted when the search for the last item ended. For example, in the *AI Method* described above, the recording of time started from the command ai=Lisa and ended with the noting down of the abstract number of the article published in the *Journal of Educational Media and Library Science* (the last item in Table 4). The difference of the two notings indicated the time spent on each individual method of search. The entire search was done in one stretch in all the three cases.

9. Network Used

LISA Plus database was searched using the CD-ROM network of the University of Malaya Library. *Ulrich's Plus* was searched on its own as it was not available on the CD-ROM network.

RESULTS AND DISCUSSIONS

The results of three different methods of search is presented in Table 6. The manual

method tops the list with the score of 73. The citation scanning method ranks second with the score of 42. With the score of 19 the AI method ranks last. As far as time is concerned, the manual method has consumed the least amount of time (26 minutes). The AI method has taken 41 minutes, and the citation scanning method 90 minutes. As such, the manual method, much contrary to belief, is found to be the best both in terms of time and data retrieval.

The following section will consider the reasons for the success of the manual method over the computerised methods and examine how the manual method has failed to retrieve some of the abstracts.

Causes of Failure

AI Method

Following the AI method only 21 (24.7%) of abstracts out of 85 were retrieved. Table 7 provides the distribution of the abstracts retrieved according to periodicals.

On comparing Table 7 with Table 4 it is found that only seven periodicals, viz. *Biblos Japan*; *IASLIC Bulletin*; *Journal of Library and Information Science (India)*; *Journal of the Educational Media and Library Sciences*; *Library Science with a slant to Documentation*; *Lucknow Librarian*; and *Yad Lakore* of the two tables match. The method could retrieve the rest of the periodicals for the following reasons. In *Ulrich's Plus*, *Bulletin of Japan Special Libraries Association* has been entered under the Japanese title *Senmon Toshokan*. On the other hand *Toshokan Kai* and *Toshokan Zasshi* have been entered under their English names *Library World* and

Library Journal respectively. Hence, these three titles did not match. *ISLIC Bulletin* changed its title to *Bulletin of the Israel Society of Special Libraries and Information Centres* for vol.19 (1992/1993) giving rise to another mismatch. The remaining titles in Table 4 were left out most probably due to the lack of information in *Ulrich's Plus* database as to their coverage by *LISA*. Hence, the retrieval of relevant abstracts was so poor.

Citation Scanning Method

Even after scanning all the 671 brief citations one by one, the number of abstracts of our interest that could be located totaled only 39 (45.9%)! (Table 7). The 30 abstracts belonging to the articles that appeared in *IASLIC Special Publications* and *ULIS* were not detected because the former being the proceedings of *IASLIC's* annual conferences/seminars, the entries contain the names of the conferences/seminars and not the name of the serial, and the latter name, i.e., *ULIS* does not figure in *Ulrich's Plus* at all. Hence, the abstracts of the articles of these two publications were missed. The other abstracts which could not be captured by this method are shown in Table 8.

The fact that these abstracts excepting abstract no. 9306861 were not assigned the keyword Profession and hence could not be captured and no reasons can be ascertained as to why abstract no. 9306861 could not be captured.

Manual Search Method

The manual search has missed twelve abstracts (Table 9). As can be seen from the subject headings (and also verified from the

Table 6: Abstracts Retrieved Through Various Methods

Abstract No.	AI Method	Citation Scanning Method	Manual Method
9300010		Y	
9300026		Y	Y
9300028		Y	Y
9300030		Y	Y
9300039			Y
9300187		Y	
9301226		Y	Y
9301248		Y	Y
9302119	Y	Y	
9302126			Y
9302197	Y	Y	
9302548	Y	Y	
9302766	Y	Y	Y
9302789		Y	Y
9302790			Y
9302814		Y	
9303309			Y
9303310			Y
9303313			Y
9303331	Y	Y	Y
9303339	Y	Y	Y
9303343			Y
9303347			Y
9303348			Y
9303350			Y
9303351			Y
9303352			Y
9303353			Y
9303354			Y
9303357			Y
9303358			Y
9303359			Y
9303360			Y
9303366			Y
9303636	Y	Y	
9304064	Y	Y	
9304088	Y	Y	Y
9304094		Y	Y
9304101		Y	Y
9304111		Y	Y
9304114	Y	Y	Y
9304115	Y	Y	Y
9304116	Y	Y	Y
9304120	Y	Y	Y
9304784	Y	Y	
9304807			Y
9304816		Y	Y
9304833		Y	Y
9304998		Y	
9305555	Y	Y	Y
9305558	Y	Y	Y
9305559	Y	Y	Y
9305571	Y	Y	Y
9305677	Y	Y	
9306203			Y
9306204			Y
9306207			Y
9306208			Y
9306209			Y
Total	19	42	73
Time taken	41 min.	90 min.	26 min.

Table 7: Distribution of Abstracts According to Periodicals

Name of Periodical	No. of Abs.	Captured by		
		AI Method	CS Meth.	Manual
Biblos Japan	1	0	0	1
Bulletin of the Israel Society of Special Libraries and Information Centres	3	0	2	3
Bulletin of Japan Special Libraries Association	2	0	1	2
CLIS Observer	4	0	1	3
Herald of Library Science	5	0	4	4
IASLIC Bulletin	9	9	9	7
IASLIC Special Publications	28	0	0	28
Journal of Educational Media and Library Science	4	4	4	3
Journal of Library and Information Science (India)	3	3	2	2
Journal of Library and Information Science (Taiwan)	1	1	1	0
Kekal Abadi	2	0	2	1
Library and Information Science	3	0	2	2
Library Science with a slant to Documentation	3	2	2	1
Lucknow Librarian	1	0	0	1
Toshokan Kai	4	0	1	4
Toshokan Zasshi	7	0	5	6
Turk Kutuphaneciligi	1	0	1	1
ULIS	2	0	0	2
Yad Lakore	2	2	2	2
Total	85	21	39	73

Table 8: Subjectwise Distribution of Non-detected Abstracts

Class No.	Subject Heading	Abstract Nos.
2.0	Profession	9306861
2.10	Organisations	9303310
2.11	Biographies	9303309, 9303313, 9304807
2.12	Education and Training	9303343
2.13	Library and Information Science Staff	9302126, 9302790, 9306261, 9306267
2.14	Personnel Management	9303366
2.15	Types of Staff	9300039, 9306227, 9306960, 9306961

abstracts), the items missed by manual search were not really devoted to library profession. Some of them were closely related, while others were remotely connected. Only one item which figures under the heading Librarianship and Information deals with the role of the library profession vis-à-vis library and information services. It is felt that the item could have been better placed under the heading Profession.

CONCLUSION

The study makes it amply clear that the computerized search till now is not the panacea. Computerised search will have to be supplemented with manual search in order to achieve optimum recall of relevant items. While scanning the printed pages of *LISA*, a number of abstracts of articles from IASLIC conferences and seminars were found. These are in fact *IASLIC Special Publications*, an annual proceedings of the IASLIC (Indian Association of Special Libraries and Information

Centres) conferences/seminars. It was found that the abstracts published in *ULIS* are all in Japanese, hence it did not take time to recognise *ULIS* as a Japanese periodical. A computer fails to take care of such vagaries which a human mind, in many cases, can.

The different ways of rendering titles in *Ulrich's Plus* and *LISA* has led to the non-detection of a number of items. In *LISA*, non-English journals are sometimes entered by their original names, e.g. *Toshokan Kai*, *Toshokan Zasshi*, etc. (whilst in *Ulrich's Plus* they appear as *Library World*, *Library Journal*, etc), and sometimes by their translated name, e.g. *Bulletin of Japan Special Libraries Association* (*Senmon Toshokan*). To allow for better retrieval by titles, uniformity should be maintained or facilities should be provided so that titles can be retrieved both under their original and translated names.

The computerised method took more time because of the following reasons; (a) a print-

Table 9: Subjectwise Distribution of Abstracts Missed by Manual Search

Class No.	Subject Heading	Abstract Nos.
1.0	Librarianship and Information System	9304064
1.1	Publications and Database	9304784
1.11	Conference	9300010
1.12	Research	9302119
3.13	Academic Libraries	9302814
4.0	Users and Users Services	9302197
4.14	Users - Occupational Groups	9305677
6.11	Library Management (Other than Personnel Management)	9304998
9.0	Technical Services	9300187
9.11	Acquisitions	9303636
9.15	Preservation	9307409
12.26	Classification	9302518

ed page of *LISA* containing about a dozen abstracts can be scanned at a glance; (b) in computerized searches users can only view the information one screenful at a time; (c) a full record is displayed in more than one screen which makes browsing cumbersome and time consuming.

Another factor which consumes a great deal of time during brief citation scanning is the truncated title of the journal. Sometimes a truncated title stands for three different journals. For example, Library and Information represents *Library and Information Research*

News; Library and Information Science; and Library and Information Science Research. Of these three, only *Library and Information Science* is an Asian journal. To find out the abstracts from *Library and Information Science* one is obliged to see the abstracts from the other two journals as well, to be sure that they do not belong to *Library and Information Science*. Of course, there is a way out. Instead of truncating the titles, the abbreviated forms of the titles may be used to clearly distinguish one title from the other. In the brief citation, the field length for the title is found to be of 19 bytes. Within 19 bytes

almost all titles can have unique abbreviations. The aforesaid three titles can be abbreviated as follows:

Lib Inf Res News = 16 bytes

Lib Inf Sci = 11 bytes

Lib Inf Sci Res = 15 bytes

Possibly, the time has come for Ulrich's database publishers and others as well to render the titles of periodicals in the way the users want/render it. It is to be remembered that it is the user who renders the title in the references in each article quite ignorant of the cataloguing rules. Again, it is the user who looks for it in the databases more than anybody else. A normal user will look for the title *DRTC Refresher Seminar* under DRTC and not under such form of entry as *Indian Statistical Institute. Documentation Research and Training Centre. DRTC Refresher Seminar* given in *Ulrich's Plus*, because even in his wildest imagination he might not know that the title *Indian Statistical Institute. Documentation* he is viewing in brief citation is for *DRTC Refresher Seminar*!

Certain items related or remotely connected to the library profession were missed during manual searches. It may be argued that they could have been retrieved using the subject index. However, a reference to them [such as *see also* abstract nos. ...] just under the

heading Profession in the text would have definitely increased their chance of retrieval as Man has a tendency to follow the path of least effort.

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APPENDIX

List of Asian LIS Journals as recorded in *LISA Plus* 1993/1994

1. **Advances in Library and Information Science.** Jodhpur, India. 1/12. 1990+
2. **Alei Sefer.** Department of Bibliography and Librarianship, Bar Ilan University Press. Ramat Gan, Israel. 2/12. Text in Hebrew?. 1975+
3. **Al-I'Lamiya/Information.** Information Department, United Arab Emirates University. Al-Ain, UAE. 4/12. Text in Arabic. 1985+
4. **Annals of Library Science and Documentation.** Indian National Scientific Documentation Centre. New Delhi, India. 4/12. 1954+
5. **Asian Libraries;** the library and information services journal. Library Marketing Services Ltd. Hongkong. 4/12. 1991+
6. **A S L P Bulletin.** Association of the Special Libraries of the Philippines Manila, Philippines 4/12. 1954+
7. **Atma Jaya Research Centre. Library Bulletin** Jakarta, Indonesia. 12/12. Text in Indonesian. 1978+
8. **Baca/Read;** brief communication for information workers and users in science and technology. Centre for Scientific Documentation and Information. Jakarta. Text in Indonesian? 4/12. 1974+
9. **Bangladesh Library Science News Bulletin.** Department of Library Science, University of Dacca. Dacca, Bangladesh. 6/12. 1975+
10. **Biblia.** Tenri University Press. Nara, Japan. 2/12. Text in Japanese. 1949+
11. **Biblos / Biburosu;** monthly magazine for branch libraries, executive, judicial and other special libraries. National Diet Library. Tokyo, Japan. Text in Japanese. 1950+
12. **C D N L A O Newsletter.** Conference of Directors of National Libraries of Asia and Oceania. International Cooperation Division, National Diet Library. Tokyo, Japan. 3/12. 19??+
13. **China, Republic. National Central Library Newsletter.** Taipei, Taiwan 4/12. Text in Chinese?. 1969+
14. **C L I S Observer.** Centre for Library and Information Study. New Delhi, India. 4/12. 1984+
15. **Concepts in Communication Informatics and Librarianship.** Concept Publishing Company. New Delhi, India. 4-5/12. 1988+
16. **Conference of Southeast Asian Librarians. Proceedings.** Singapore. Irr. 1970+
17. **Dan'gan Xue Yanju** (=Archives Science Study). Chinese Archives Society. Beijing, China. 4/12. Text in Chinese. 1987+
18. **Dan'anxue Tongxun** (=Archives Science Bulletin). People's University of China. Beijing, China. Text in Chinese, Contents page in English. 1978+
19. **Daxue Tushuguan Xuebao** (=Journal of Academic Libraries). National Committee for Universities and Colleges, Library and Information. Beijing, China. 6/12. Text in Chinese. 1983+
20. **Denshi Raiburui.** Electronic Library Consortium. Tokyo, Japan. 6/12. Text in Japanese. 1991+
21. **DESIDOC Bulletin of Information Technology.** Defence Scientific Information and Documentation Centre. Delhi, India. 6/12. 1980+.
22. **Documentation and Information Services.** Korean Scientific and Technological Information Centre. Seoul, South Korea. 6/12. Text in Korean. 1968-??.
23. **Dunia al-Maktabat.** Ministry of Education, Manama Central Library. Manama, Bahrain. 12/12. Text in Arabic. 19??+
24. **Eastern Librarian.** Library Association of Bangladesh. Dacca, Bangladesh. 2/12. 1966+
25. **Fasname-yi Ketab.** National Library of Iran. Teheran, Iran. 4/12. Text in Persian. 1990+

26. **Government Oriental Manuscripts Library Bulletin.** Madras. 1/12. Text in English and other Indian languages. 1948-1990.
27. **Granthagar.** Bengal Library Association. Calcutta, India. 12/12. Text in Bengali; Summary in English. 1937+
28. **Granthalya Vijnana.** P. Kaula Foundation for Library and Information Science. Lucknow, India. 2/12. Text in Hindi. 1970+
29. **Guji Zhengli Yanju Xuekan.** Northeast Normal University. Jelin, China. 6/12. Text in Chinese. 19??+
30. **Hankong Dang'an** (=Aeronautics Archives). Ministry of Aerospace Industry Archives. Beijing, China. 6/12. Text in Chinese. 19??+
31. **Heilongjiang Tushuguan/Heilongjiang Library.** Heilongjiang Provincial Library. Heilongjiang, China. 6/12. Text in Chinese. 19??+
32. **Herald of Library Science.** P. Kaula Foundation for Library and Information Science. Lucknow, India. 4/12. 1962+
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